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Alzheimer's disease may begin in the nose and may be caused by aluminosilicates.

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<Aluminum Silicates/ME/PO> <Alzheimer's Disease/CI/ME/PA> <Olfactory Mucosa/IR/ME/PA> <Aging/ME/PA> <Animal> <Brain/ME/PA> <Human> <Neurofibrils /ME/PA> <Neurons, Afferent/ME/PA> <Support, Non-U.S. Gov't> <Review> <Medline File>

Genetic factors may interact with aging changes in the nasal mucociliary apparatus to increase the probability that ubiquitously occurring aluminosilicates may enter sensory neurons of the olfactory epithelium and spread transneuronally to several olfactory-related areas of the brain, thereby initiating changes that eventually result in neuronal damage typical of Alzheimer's disease. A speculative sequence of events is suggested by which neuronally-contained aluminosilicates might cleave or otherwise alter a normal cellular protein in such a manner that aggregates would arise that could interfere with cellular function and which also could act in a pseudo-infective manner, relaxing translational and transcriptional controls in the synthesis of the native protein. Some relevant experiments and potential therapies arising from the hypothesis presented are discussed.